ABSTRACT OF THE DISCLOSURE

A handlebar structure for an electrically powered vehicle includes a front fork unit, a connector bar unit, and a handle unit wherein the front fork unit having a coupling section protruding at the top thereof is engaged with the connector bar unit having a retaining block adapted therein, and the handle unit is joined to an engaging cavity of the connector bar unit to form a two-stage handlebar adjustment structure. A top quick release unit is applied to clamp tight the handle unit for location at the connector bar thereto, and a bottom quick release unit is screwed up to the retaining block thereof to compress a spring element adapted at the retaining block therein. Via the top and bottom quick release units and a retaining teeth facet of the retaining block in meshing engagement with an adjusting teeth facet of the front fork unit, the handle unit can be precisely adjusted up or down, or swung back and forth into an angle, flexibly adjusting the position of the handle unit relative to that of an saddle thereof to match the length of hands and legs of a rider to provide a comfortable handlebar structure for the rider in the best riding posture. Besides, with the locating pin limited by the top quick-release unit thereof, the handle unit is securely adjusted at the engaging cavity of the connector bar unit therein without been detached there-from when pulled upwards by undue force, effectively protecting the handlebar structure thereof.